

PRELIMINARY SKETCH of the mural space ar- scaffold in the Building 2 museum. The final and female astronauts added. The mural will
 tist Robert T. McCall is painting from a version has been changed: the logos removed be finished in May. (Related story Page 4)

ROUNDUP

Lyndon B. Johnson
Space Center



March 9, 1979 Houston, Texas

Vol. 18, No. 5

STS Update

Columbia, the first Space Transportation System Orbiter, takes off today from Dryden in California to ride on the back of NASA's 747 carrier to Kennedy Center, arriving there Saturday afternoon. Columbia will make 3 intermediate stops at military air bases along the way, stopping overnight at Kelly AFB in San Antonio.

At Kennedy, Columbia will spend 20 weeks in systems testing and checkout including installation of 7800 ceramic tiles, 3 main engines, and the Orbiter Maneuvering System. It will then spend 3 weeks in the Vehicle Assembly Building being mated to its External Tanks and the Solid Rocket Boosters.

The Columbia will then be moved to the pad and be ready for launch.

The Orbiter Enterprise has successfully completed a year-long series of ground tests at Marshall. It will be ferried to Florida, where it will be used in pre-launch tests and checkout. At the completion of these tests, Enterprise will return to California.

Each launch of the STS will create shock waves, and a series of test explosions is underway at Kennedy to study the effects of various weather conditions on the spread of these shock waves. The information will be used to define weather constraints that may affect launches of Space Shuttle Orbiters.

The Shuttle's SRB motor successfully completed a series of 4 developmental static firings Feb. 17, at Thiokol's Utah test site through Marshall. Qualification firings will begin in the spring, readying the motor for use in the first manned

flight. These tests will demonstrate the production, assembly, and firing cycle to support a full schedule of Shuttle flights.

NASA has selected Management and Technical Services Co. of Houston, a subsidiary of GE, for negotiations leading to the award of a cost-plus-award fee contract to perform Life Sciences Flight Payload Development, Engineering and Operations.

The contract covers engineering, planning, technical management, operational support, and acquisition of equipment to support STS life sciences experiments. The contract runs from March 1979 to February 1984.

And NASA has bought the "Super

Guppy." JSC signed a firm-fixed-price contract with Twin Fair, Inc. of Buffalo, NY for the aircraft.

The "Super Guppy" is a modified Boeing KC-97 with an extensively enlarged fuselage for carrying oversized loads. It will transport Space Shuttle hardware the way it was used during Apollo and Skylab, hauling spacecraft and equipment from manufacturing plants to NASA centers.

The contract is valued at \$2,935,000, and covers spares, ground support equipment and manuals, and flight crew and maintenance training which will take place at JSC's flight operations area at Ellington.

White Sands named backup landing strip

By Terry White

The great white blotch in New Mexico's Tularosa Valley can be seen from the air for a hundred miles or more. Tourists drive out into the gypsum dunes from Alamogordo to view nearby White Sands National Monument.

The place seems like an illogical location for landing a spaceship; but a flat, hardpacked stretch running north and south across the white dry lakebed has been named the backup landing strip for the Space Shuttle Orbiter, scheduled for first space flight in November.

The Northrup strip on White Sands lakebed was chosen because it remains dry most of the year. Moreover, Northrup strip is under the flight path of the critical first Earth orbit after a Shuttle launch. Should the Orbiter not be in a safe orbit, or should some other emergency force a landing on the first orbit, the spacecraft would be slowed down by a deorbit rocket engine burn high over the South Pacific east of Samoa. As the Orbiter entered the Earth's atmosphere, the flight path would cross Baja California and the Mexican state of Sonora until the spacecraft was in denser atmosphere. The crew would fly it "dead-stick" into Northrup Strip.

Shuttle Orbiter Columbia will make 6 orbital test flights before the Shuttle Transportation System becomes operational. The first 4 of these test flights will land at Edwards Air Force Base, California, and subsequent Orbiter landings will be on the 15,000-foot Shuttle runway at

Continued on Page 4



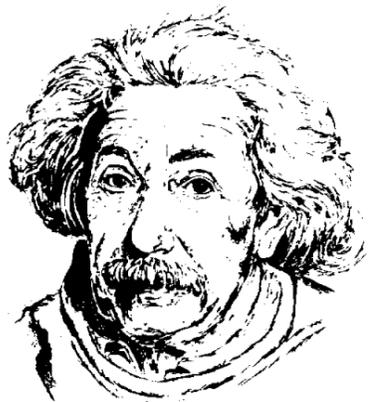
TESTING CONTINUES of future Orbiter equipment and space construction devices at JSC. Spacecraft design engineers last month tested a "cherry picker" attachment to be used with the Shuttle's remote manipulator arm in the near-term for satellite servicing, and in the long-term for space construction. The tests had astronaut Joe Kerwin in a prototype Space Shuttle suit simulating operation of the "cherry picker" in the underwater neutral buoyancy of the WIF. Mission Specialist astronauts will manipulate the "cherry picker" from controls on-board the orbiting work station.

EINSTEIN: A man who will live forever turns a hundred March 14

A clock in low orbit will go slower than a clock in high orbit because of gravity and speed. Time expands as you approach the speed of light and you age more slowly. Rays from far off in the Universe bend in the space-time continuum. All these laws will be factors in future spaceflight and space physics, and they are the work of one man, a genius, whose birthday is this month.

Albert Einstein would be 100 years old March 14, 1979. His memory and work will keep him alive for centuries.

NASA's HEAO II satellite, launched in November, was informally named "The Einstein Satellite" by scientists with experiments on board. To understand the discoveries made by HEAO II, scientists will be using Einstein's theory of general relativity, which explains how cosmic radio waves could



Sketch by Lois Miller

be coming from another time.

Einstein's 1905 paper, which later won the Nobel prize, explained the

photoelectric effect: A light beam hitting a target excites electrons. Rice University Professor John Freeman today is studying ways to make use of the bouncing electrons as a generator in a space solar power satellite.

In 1940, Einstein became an American citizen, working at the (Max Planck) Institute for Advanced Study. He was the most sought-after and respected scientist of this century—asked so often to pose he once gave his occupation as "artist's model."

He died in 1955, not yet aware of the light he had shed on future cosmology, his theories taking half a century to be tested.

1979 is the Year of Einstein. And one can only speculate on the years and the impact Einstein's theories will have on man's future, on Earth and in Space.

Lunar Planetary Conference

See the recent shots of Jupiter

The 10th Lunar and Planetary Science Conference takes place March 19-23 at the Space Center.

Of special interest are the evening sessions open to the public at 7:30 in Building 2 Auditorium. Monday's will be "Future Lunar Exploration," Tuesday's, "The Earth from Space."

Thursday night, updated results from the Voyager Jupiter mission and the Pioneer Venus will be presented. The Voyager will have just completed its close encounter with the giant planet.

Concurrent science sessions will take place at sites around the Space Center throughout the week. Registration and Open House will be Sunday the 18th at 6 p.m. at the nearby Lunar and Planetary Institute (see related story Page 4).

Bulletin Board

For the Lengths They've Served

Length of service awards for the first quarter of 1979 were presented to 25 employees by Center Director Christopher Kraft on Feb. 13. Those who had served 30 years were: Warren Gillespie, Jr.; Richard M. Gilley; Harold J. Davis; David B. Homer; Charles P. Bergtholdt; Harold E. Ream; William J. Nesbitt; Claudia W. Simmons; Gene A. Reed; John E. Williams; and Andrew W. Patterson.

Special mention should be made for Russell E. Clickner and Charles Gordon, who have served now for 35 years.

Remember the College Fund

The NASA JSC Exchange has established a college scholarship fund for children of JSC civil service employees. This year, 2 scholarships will be awarded on the basis of scholastic achievement, financial need, and school or community involvement. Please contact Ruth Hollen, x-2358, for the forms or for additional information.

On Sale at the JSC Exchange Store

Dean goss tickets - \$10 single \$20.00 couple (Reg. \$14.50 each)
 ABC Theatre tickets - \$2 each
 General Cinema tickets - \$2.40 each
 Magic Kingdom Cards - Free
 Six Flags Over Texas tickets now on sale. Season starts March 3. Tickets good for one day \$7.25 (Reg. \$9.25) Tickets good for two days \$9.25 (Reg. \$13.95)

Can You Qualify As a Toastmaster?

Yes. If you are male or female and of legal age. An application, small fee, and annual dues can get you started. Benefits are substantial, and the learning is fun. Contact Rudy Williams at 483-2254 or 486-8119.

Who would want to be a Toastmaster? Anyone who wants more friends; a larger income; a healthy self-image; self-confidence; an improved ability to listen, think and speak; and more success in daily life.

Are You Playing Enough Tennis?

The 1979 JSC Tennis Club season is about to begin. Membership applications will be mailed out to past members soon; anyone wishing to join for the first time, contact our Membership Chair, CF3/Linda Horwitz, x-3035. The first scheduled JSC Tennis Club tournament will be an Open Mixed Doubles held at the Friendswood Racket Club on April 6, 7, and 8.

The Club has active men's and women's ladders that offer great opportunities to meet new opponents and increase your playing time. For more information, contact Ladder Chair EE6/Bill Zrubek, x-3669.

"The Universe Game" at Baker

From March 9-May 27, Burke Baker Planetarium will show "The Universe Game." For reservations call 526-4273. The planetarium is part of the Museum of Natural Science in Hermann Park.



BLACK HISTORY month at JSC meant 2 days of films, exhibitions, and presentations. 4 employees received keys to the city: Doris Roberts, Howard Renfro, Quarance Patin, and Julius Mayhorn—for their work on the Family Affair Christmas Project which raised \$3000 this year. Certificates of Appreciation went to 12 employees. At right, Inez Pabi shows African art, and Robbyn Matthews of LaMarque High performs a theatrical piece.



James Michener addresses Senate

(James A. Michener testified before the Senate Subcommittee on Science, Technology, and Space Feb. 1. Excerpts follow.)

"There are moments in history when challenges occur of such a compelling nature that to miss them is to miss the whole meaning of an epoch. Space is such a challenge.

"We risk great peril if we kill off the spirit of adventure, for we cannot predict how and in what unrelated fields it will manifest itself. A nation which

"The sense of exploration is intimately bound up with human resolve."

loses its forward thrust is in danger, and one of the most effective ways to retain that thrust is to keep exploring possibilities. The sense of exploration is intimately bound up with human resolve, and for a nation to believe that it is still committed to forward motion is to ensure its continuance. . .

"Therefore we should be most careful about retreating from the specific challenge of our age. We should be reluctant to turn our back upon the frontier of this epoch. Space is indifferent to what we do; it has no feeling, no design, no interest in whether we grapple with it or not. But we cannot be indifferent to Space, because the grand slow march of our intelligence has brought us, in our generation, to a point from which we can explore and understand and utilize it. To turn back now would be to deny our history, our capabilities."



Does this man have Saturday Afternoon Fever?

Events are beginning to fall in place for the EAA picnic—Saturday Afternoon Fever—on May 5. Preteen activities chairs, Dale and Cindy Martin, are planning 3-legged races, sack races, tug-of-wars, and pillow fights. These will be spread out through the afternoon with ample time between for soft drinks, popcorn, snow cones, kiddie rides, hay rides, etc., or to visit with Zay Wynn, the clown, and his balloon sculptures. Preteen tickets will be \$2.50 (ages 3 thru 12). 2 years old and under do not require tickets.

First Aid Course could help in those first critical moments

What would you do if a life-threatening emergency occurred in your home? Would your knowledge of first aid enable you to save your friend's life... or would you stand by helplessly, watching him/her choke to death on a piece of rib roast?

Medical experts agree that the first few minutes following an accident or attack are often the most critical and that prompt action may very well mean the difference between life and death. Unfortunately, thousands of Americans die each year because the people who are in

a position to help them during those first critical minutes don't know what action to take.

A 30-minute film, produced by the American Red Cross and Gallery of Homes, has been produced to acquaint the public with major causes of home accidents and the proper way to deal with these situations. This film will be shown on Wednesday, March 14 at 10 a.m. and 1 p.m. in the Building 30 Auditorium. A physician will be present to answer any questions.

Think Tank

This puzzle doesn't take calculus, just a calculating mind. A man begins at point X, goes 1 mile south, 1 mile east, 1 mile north, and is back at point X. Where on the Earth's surface can point X be? (Think carefully—there is more than one such point.)

Submit your answer to Puzzle Editor AP3 by Thursday the 15th, and then watch the next Roundup for results.



Tax Box

The cost of a special diet prescribed by a doctor for medical reasons is deductible on your income taxes—just as the cost of doctors' visits, hospital care, and prescriptions—as a result of recent decisions made by the U.S. Tax Court.

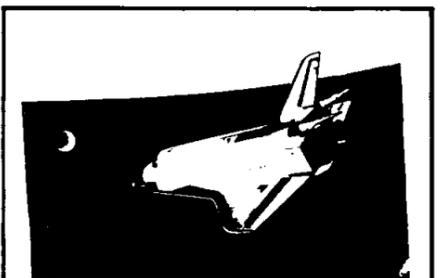
One case involved a woman with hypoglycemia. She had to go on a high protein diet to balance her blood sugar level. Another case involved a couple who broke out in hives if they ate chemically treated foods. They had to buy groceries in "organic" food stores.

The Tax Court ruled that additional costs to a food bill may qualify for a medical expense deduction—costs for foods that meet "abnormal" diet requirements caused by a disease.

To get this deduction, keep accurate records of your food bills, making it clear which expenses are in addition to normal groceries. The special diet has to be prescribed by a doctor, and must be related to a medical condition. *Tax Box tips are a courtesy of the Federal Women's Program.*

NEBA FACT

The death rate declined in 60 years (1915 to 1975) from 14.4 to 6.4 per 1,000 population.



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Initiative works and earns awards

It's that willingness to do a little more work than what you're asked to do that earns awards, kudos, and promotions. Leona F. Germany is Division Secretary for Technical Services. This means she acts as receptionist, correspondence preparer, appointments coordinator, and record-keeper—the tasks of most secretaries.

But Leona Germany keeps her eyes open for additional jobs, takes them on, and does them well. She on many occasions serves as recorder for Source Evaluation Boards, and her performance earns her praise. She located a ceramics studio and a statue at a good price to be used for 1978 Cost Reduction and Minuteman Bicentennial awards. She acts as supervisor and trainer for new employees, indoctrinating them to the work at NASA.

This extra effort has not gone unnoticed. Leona Germany won the Secre-



Leona Germany
Secretary of the Month

tary of the Month award for February. She has been with Tech Services for 17 years, a division that handles requests for fabrication from nearly every organization at the Center. Leona Germany has proved herself excellent to work with and an excellent example for other secretaries as well as the 104-member Division staff.

What's cookin' in the JSC cafeteria

Week of March 12 - 16

MONDAY: French Onion Soup; Beef Chop Suey; Polish Sausage; German Potato Salad; Breaded Veal Cutlet (Special); Okra & Tomatoes; Green Peas. Standard Daily Items: Roast Beef; Baked Ham; Fried Chicken; Fried Fish; Chopped Sirloin; Selection of Salads, Sandwiches and Pies.

TUESDAY: Split Pea Soup; Shrimp Creole; Salisbury Steak; 8 oz T-Bone Steak; Fried Chicken (Special); Mixed Vegetables; Beets.

WEDNESDAY: Clam Chowder; Fried Catfish w/hush puppies; Braised Beef Ribs; BBQ Plate; Weiners & Beans; Shrimp Salad; Stuffed Bell Pepper (Special); Corn O'Brian; Italian Green Beans; Rice.

THURSDAY: Chicken Noodle Soup; Beef Stroganoff; Turkey & Dressing; BBQ Smoked Link (Special); Lima Beans; Buttered squash; Spanish rice.

FRIDAY: Seafood Gumbo; Broiled Flounder; Liver w/onions; Seafood Platter; Fried Shrimp; Meat Sauce & spaghetti (Special); Green Beans; Buttered Broccoli; Whipped Potatoes.

Week of March 19 - 23

MONDAY: Beef & Barley Soup; Beef Chop Suey; Breaded Veal Cutlet w/cream gravy; Grilled Ham Steak; Weiners w/baked beans (Special); Whipped Potatoes, Brussels Sprouts; Buttered Rice. Standard Daily Items: Roast Beef; Baked Ham; Fried Chicken; Fried Fish; Chopped Sirloin. Selection of Salads, Sandwiches & Pies.

TUESDAY: Celery Soup; Frito Pie; Turkey a la King; Pork Chop w/applesauce; Chinese Pepper Steak (Special); Au Gratin Potatoes, Breaded Squash; Buttered Spinach.

WEDNESDAY: Clam Chowder; Fried Catfish w/hush puppies; Braised Beef Ribs; Mexican Dinner (Special); Spanish Rice; Ranch Beans; Buttered Peas.

THURSDAY: Green Pea Soup; Corned Beef w/cabbage; New potatoes; Chicken & Dumplings; Tamales w/chili; Hamburger Steak w/onion gravy (Special); Navy Beans; Buttered Cabbage; Green Beans.

FRIDAY: Seafood Gumbo; Deviled Crabs; Broiled Halibut; Liver & Onions; BBQ Link (Special); Breaded Squash; Green Beans; Lima Beans; New Potatoes.

Profile Gifted student, gifted employee: JSC's youngest flight controller

The smile is infectious. There's something about the way her face and body are an integral part of the smile that draws in everyone around her. As she answers a question, the smile bubbles up and becomes a laugh, part of her talk.

That's why when Jackie Parker walks down the hall in Building 4 she starts everyone's sense of humor going: "Getting in trouble again, Jackie," someone calls out; "Sneaking out on the job again, huh, Jackie?" someone else jokes.

She answers with that laughing laugh that brightens moods for about 34 FOD employees a day. Her pace keeps her speech near breathless.

At age 14, Parker entered college to study Math. Today, she is 18 with a bachelor's degree in Computer Science, and she reigns as JSC's youngest flight controller.

"Nothing unusual happened except a few gifted student programs until I skipped the 9th grade," Parker says. "Then I took the first 3 credits of 10th grade that summer, and I finished my 10th and 11th grade requirements in that school year."

Parker qualified to skip 9th grade and breeze through high school partly because of her varied background. Her family "moved around a lot," she says, "after my father retired in the Fifties."

Her father is Dr. W. Dale Parker, a former JSC employee.

Rather than go through the high school

hassle of getting in with a new clique every time the family moved, Jackie entered the University of Central Florida (then Florida Technological University).

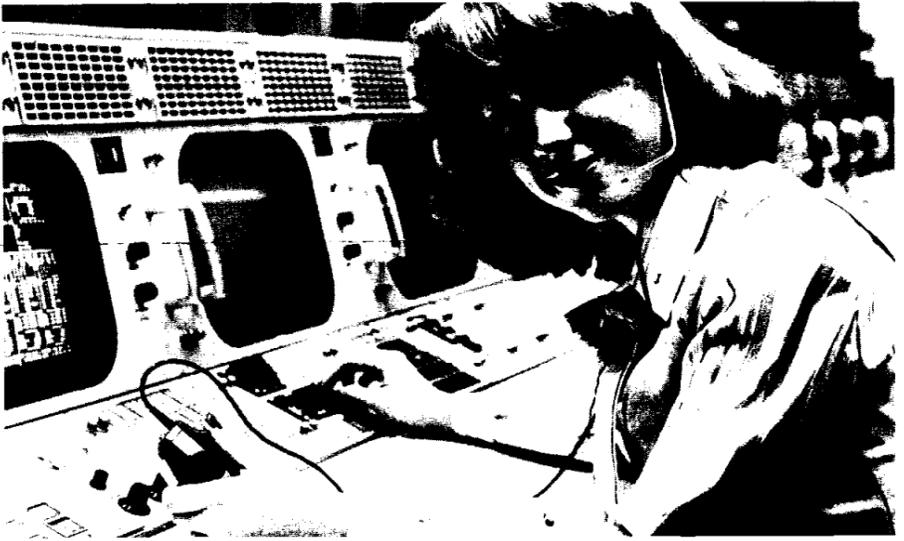
With her usual flare, she finished the 4-year program in 3 years, including Math courses she'd missed in high school and taking 41 hours of Computer Science in 2 quarters. She graduated at age 17.

After she worked one summer as an intern computer systems analyst, FOD hired her as a console operator, a flight controller. "I'm in support of the DPS console in the Mission Operations Control Room (MOCR)," she says. "I'm in the position during the ascent phase."

With the coming of integrated sims, she is "learning the materials that we're going to absolutely have to know for beginning the sims," she says.

Her favorite hobby is flying. "I got my pilot's license when I first turned 17," she says and laughs. "I learned to drive about a week after that. I'm now interested in aerobatics."

NASA is renowned for hiring only the best, and Jackie Parker helps keep up that reputation. She's a former member of Mensa and drops comments into a conversation such as "Calculus is a breeze if you know your trig identities." As to her future, she applied for the astronaut program last time, and plans to apply again. "That's my goal, my long-term goal," she says, and that contagious smile is back.



Roundup Swap Shop

Property & Rentals

Rent: Bolivar Beach cottage on Gulf, wood burning fireplace, special 3-day pre-season weekend rate. Horton x3734.

Rent: Vacation Lake Livingston Cape Royale, Beautiful resort community with all amenities. Enjoy charming custom 3-2-1 complete. furn. home nestled among trees by the water. Rent w/mo/yr. 488-4487.

Texas Veteran land tracks. 482-7697 after 5.

Sale: Heritage Park/Webster, 4-2-2, contemporary, "must see to believe," behind Baybrook Mall, beautifully landscaped, VA/new loan, \$53,000. 332-2279.

Lease: 3-2-2 Wood Meadow (near Sagemont) refrig, drapes, fireplace 410.00/month, first, last plus deposit. 334-3202 after 5.

Sale: Forest Bend, 4-2-2 conv w/gameroom, den, fireplace, covered patio, builtins, bay windows, comm park and pools, assume 8% FHA w/\$330/mo, full price \$52,500. 482-3739.

Sale: House in Friendswood, 3-2-2, split bedroom plan, 1650 sq. ft. formal dining, fireplace, fenced, new paint inside and out, 3 yrs old, Clear Creek schools. Exc Cond, many extras. Refrig and washer-dryer available. 482-4874 after 5.

Sale: League City. Immaculate 4-2-2A, Mediterranean home. Good carpet, butcher-block counters, built-in microwave. Family room, Cathedral ceiling, large patio. Assume \$16,450 equity or new loan—\$51,950. Call Jimmy. 479-1541 x-339; or 554-2424 eves.

Cars & Trucks

70 Wards Traveler Pop-Up camper, weighs 900 lbs, sleeps 4 adults, plus 1 child, good cond, very little use, \$650. Joosten 488-2467 after 5.

72 240Z 4spd mags 64000 miles. 331-8665.

75 Ford Elite, tape deck, stereo, CB & antenna, PB, PS, new vinyl top. Loden x3669 or 643-7460 after 5:30.

77 Monte Carlo Landau, all power, cruise control, AM/FM with tape, tilt wheel, etc. Mint condition, warranty. 332-4882 after 5.

70 Olds Cutlass Supreme, 2d, V-8, auto, A/C, PS, PB, \$975. 486-0943.

74 Porsche 914, AM-FM good cond \$3800. 482-7643.

73 VW 9-passenger van/transporter, AM radio, blue two-tone, new brakes, 55,600 miles, make offer. John x-5595 or 522-6515.

74 Chevy Chevelle Malibu Classic Estate Wagon, 3rd seat, luggage rack, A/C, cruise control, 8 track tape, good tires, \$2100. 488-5259.

Electric gold cart, Cushman, completely rebuilt, batteries under warranty, \$1450. 488-5259.

78 Dodge-Magnum XE, 360, A/C, auto, cruise, P.S., P.B., P.W.. Reclining buckets, warranty, \$5900, will trade. 466-5127.

Miscellaneous

5 tires mounted and balanced. H78-15. 4 are glass belted with less than 5000 mi. wheels are 5 lub 5-1/2 in. Circle. Fits Ford pickups, Broncos, Jeeps, Scouts, \$140 for all. 334-5746 after 5.

Brother portable Electric Typewriter and typewriter table good cond. \$150 for both. Connie 473-3106 after 5.

Black and Decker Workmate, single weight, new \$40. 482-1635.

Brown Foot Joy golf shoes, size 11B, used very little, \$25. 333-2787.

Coleman lantern \$10, beginners telescope \$10, electric ice cream maker \$10, 10-lb navy anchor \$5. 471-3303.

3 tires, GR 78x15, slightly used, steel belted radial, \$60. Sylvester 734-2565/734-7867 or Leola 734-9377.

Ads should be under 20 words and include home phone number. Typed or printed ad copy, a separate sheet for each ad, must be in the Roundup office AP/3 by Wednesday the week prior to publication. Swap Shop advertising is open to JSC federal and on-site contractor employees for non-commercial personal ads. Goods or services must be offered as advertised, without regard to race, religion, sex or national origin.

Two 7x14 mag wheels, U.S. Indy, \$80. Guess 649-5092.

Utility trailer, Sears one wheel model, very easy to tow and backup, great for camping, etc. 4' x 4' w/cover and lock, up-to-date plates. 488-0266.

Cycles

1972 Yamaha 100 cc (needs new piston and rings). Body in good cond and good tires. Selling cheap. 488-1326 after 5.

Household Articles

Delux TV \$500; sofabed \$250; maple com-mode \$50; maple coffee and step table \$25; bikes \$10 each; lamps; mattress \$20; misses wardrobe size 14 and 10, each \$75; boys clothes and girls clothes bargain. 333-2340 after 5.

Brown sectional couch, \$150, 2 matching gold LR chairs, \$40 each, walnut curved coffee table \$25. Nell 554-2690.

Antiques: Double brass bed, schoolroom clock, milk glass collection w/punch bowl. All exc cond. Doris 332-2875.

Twin bed mattress and matching box springs, 2 sets, firm mattresses, xcint cond, \$85 per set. Sam x2553.

Baby stroller, high chair, car seat and other items and clothes (boys & girls). Cindy x7236 or 944-4896.

Lady Kenmore washer, \$25. 488-6095.

Pets

Talking orange winged Amazon parrot with cage, play area and perch, \$395. Doherty 488-0182.

Boxer puppies, AKC registered, top bloodlines. V. Bailey 337-2855.

Wanted

Wanted: Old-fashioned *Original* Gregg Shorthand Manual. 334-3284.

Wanted: 66, 67, 68 VW bug. may not be in running shape. Dave Dunn 486-0808.

Wanted: Camp truck in good cond. 474-2081 after 5.

Boats & Planes

Ameagle powered sailplane kit, includes wing, landing gear, tail kits plus completed trailer. Carver x2901 or 334-1764 after 5.

25' Bayliner Sport Fisherman x/E-Z loader trailer. Custom made teak dive platform, 307 Chevy V-8 w/Volvo outdrive, exc. cond. exc. offshore performance. after 6 p.m. 944-9563 or 452-6257.

Musical Instruments

Clarinet, Evette-Schaeffer, 2 yrs old, all wood, cost \$500, priced \$150. Bernhard x4461 or 333-2968.

"Doctor Q" envelope follower (auto wah) \$35. Bates x4601 or 944-4687 after 5:30.

Carpools

Want to form carpool from Glenbrook Valley/Hobby Airport area for the 8-4:30 shift. Jim Martin x4491.

Would like to form carpool from S.W. frwy, at Westpark or that general area for the 8-4:30 shift. Interested? Contact Melba x4387.

Wanted: Rider to join carpool leaving Meyerland at 7:20 a.m. for the 8-4:30 shift. Contact Russ x4871, Carl x4871 or Cathey x6387.

Personals

Happy 40th birthday, Bill Lenoir, March 14, 1979.

Who is that man on the scaffold?

"There seems to be an ambience, an atmosphere of excitement and of mission, of direction—which is directly related to the Space Shuttle," Bob McCall says describing changes he's noticed at the Space Center in the past few years. He is a good judge. McCall has documented the space program in art since the first Mercury missions. He painted the Apollo-Soyuz and Viking-Mission commemorative postage stamps; he drew the futuristic views that illustrate Isaac Asimov's "Our World In Space"; and today he is painting a 72- by 16-foot mural on the wall of the Building 2 Auditorium.

"And if I'm physically able in

1985, which I propose to be, I would love to go up in the Space Shuttle as an artist, as a passenger," McCall says.

Since he was 17 years old, he's been making his living as an artist, "specializing in airplanes and military subjects," he says. During his years in the Air Force in WWII, he served as both bombardier and artist; the transition to the space program was "indirect."

"Air Force military aircraft and spacecraft are similar," he says. "I love painting airplanes, so the next step was to paint spacecraft."

Since then, McCall has worked often as a freelance contractor with

NASA. 30 of his paintings hang in buildings at this Center.

Specializing in space art, McCall has had his share of memorable experiences. "I had been sketching around for days, in Mission Control, during Apollo 15. And this guy, Ed Fendel, says, 'Hey, Bob, you want to sit down here and work that camera on the Moon?' Gosh. You know. For me this was fantastic. So I sat at his console, and looking at that big picture in Mission Control, I punched the buttons and I panned right. I watched that picture pan about 10 seconds. I zoomed in and I zoomed out, tilted up, tilted down, and panned the lunar landscape. I knew that my movements here were moving that camera on the Moon. That was a real thrill."

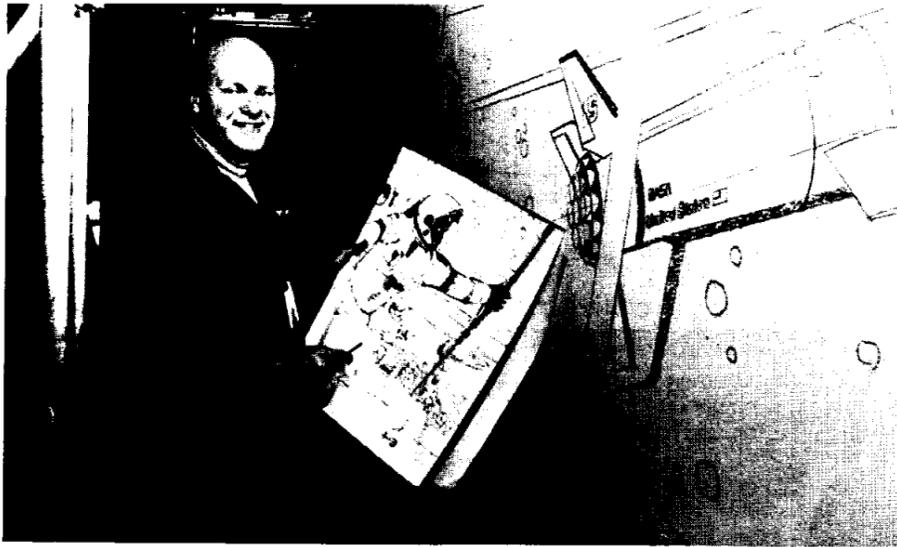
The Building 2 mural, the theme of which is "The Space Program: Past, Present, and Future," is McCall's third: His work covers walls at Marshall Center and at the Smithsonian. "I wanted to do another mural," he says. He discussed it with Chuck Biggs of JSC's Public Services, who thought it was a good idea, "and so I pursued it," says McCall.

He got a go-ahead to make a sketch, agreed on a price, and then took the first small steps. "You develop a lot of little thumbnail sketches, idea sketches—any place, any time almost—sitting in an airplane, watching television. Over a period of 6 or 8 months I did this—a gestation period for the concept.

"A more comprehensive sketch follows. It took me about a month to do that sketch (pictured on Page 1, this issue) which I brought here to show Chris Kraft and his staff. They liked it, and I did, too. It was OK'd with a few modifications.

"I made a very careful line drawing. That took about 3 weeks. Then I was ready to come here and work."

The line drawing is divided into grids of 1-1/2-inch squares. The charcoal drawing on the wall is in grids of 1-foot squares, that correspond to scale. The line-drawing grids have been made into slides, which McCall



Northrup Strip. . .

—Continued from Page 1

Kennedy Space Center in Florida.

Edwards AFB has a large dry lakebed, extending around 1 end of its main runway, that is hard packed and allows an 11-mile rollout for a landing Orbiter. Winter rains can transform the dry lake into a wet lake; and since there is little natural drainage, water removal is mostly through evaporation.

Standing water on the lakebed at Edwards AFB prior to launch would shift the normal end-of-mission landing to Northrup Strip.

Plans are underway for installing a stiff-leg derrick adjacent to Northrup Strip for hoisting a landed Orbiter onto the top of the Boeing 747 carrier aircraft used by NASA to ferry Orbiters back to Kennedy for the next launch. Additionally, a ground

station for the Shuttle microwave scanning beam landing system—a landing and approach piloting aid—will be moved to the Strip from Edwards AFB.

Other landing support equipment to be relocated at Northrup Strip include an S-Band communications van and a mobile tactical air navigation (TACAN) station to provide Orbiter crews with distance and bearing signals from the landing site.

Operational costs for retrieving an Orbiter will run about \$400,000, and up to 200 NASA and support contractor people would be temporarily assigned to the Alamogordo-Northrup Strip area for a retrieval.

The contract is valued at \$2,935,000, and covers spares, ground support equipment and manuals, and flight crew and maintenance training which will take place at JSC's flight operations area at Ellington.

THE QUIET SIDE of JSC is the nearby Lunar and Planetary Institute. Amid its marble hallways and sunken gardens, scientists from around the world study the most current data on planets and moons. Construction began on the 17,000 square foot Italian style mansion in 1929, for "Silver Dollar" Jim West and his family. West was a lumber, oil, and publishing tycoon with a penchant for handing out silver dollars like today's businessman gives you his card. The mansion was unoccupied from 1941 to 1969 when NASA began renovation. President Johnson envisioned the Institute as becoming one of the foremost space research centers in the world. The library now contains over 125 journals and a growing collection of books.



projects onto the wall. "I make those projected squares match the squares on the canvass exactly," he says.

"And now I'm painting," and the work should be complete in May.

Then he'll probably return to his other projects. "I'm art director on a forthcoming Disney film, 'The Black Hole,' which should be released in December. And I do posters for movie companies—the '2001' posters, and for another movie coming out soon, 'Meteor.'"

McCall's wife is an artist, too. "We have an apartment now across Nasa 1 with a window looking out on the bay. She's painting today. Hopefully I'll see a new painting when I come home; she paints very rapidly."

He says he doesn't miss his home in Paradise Valley, Arizona, "because I'm so busy. And I'm enjoying it here, the people, the dynamism. It's very dynamic, particularly now, with the advent of the Shuttle's major tests, the launch. It's an incredible event."